Challenge TB – Catastrophic Costs
Year 2

Annual Report

October 1, 2015 – September 30, 2016

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Cover photo: Photo of Patient cost survey interview in Vietnam by Ngoc Anh Le Thi

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Table of Contents

1. EXECUTIVE SUMMARY 6

2. INTRODUCTION 6

3. PROGRESS BY OBJECTIVE/SUB-OBJECTIVE 8

Objective 1. Improved access to quality patient centered care for TB, TB/HIV and MDR-TB services 8

Sub-objective 1. Enabling environment 8

Key Results 8

4. KEY CHALLENGES DURING IMPLEMENTATION AND ACTIONS TO OVERCOME THEM 14

5. LESSONS LEARNT/ NEXT STEPS 14

List of Tables

Table 1: Activity 1.4.3 data collection: progress in patient's recruitment at 20 clusters – TB patient cost survey
Table 2: Outcome indicators, milestones planned and achieved
Table 3: Challenge and actions to overcome them (May-September 2016)

List of Figures and Images

Figure 1. Overview of the Patient cost survey analytical approach

Figure 2. Diagram representing Vietnam Patient cost survey instrument parts.

Figure 3. Activity 1.4.1: adaptation of the generic protocol and questionnaire: electronic data collection and management tool for Patient Cost Survey, Vietnam, 2016 (screenshot in English and Vietnamese)

Image 1. Activity 1.4.2: kick off meeting in Hanoi (Photo by NTP staff)

Image 2. Activity 1.4.2: pilot data collection in Hanoi. (Photo by Inés Garcia Baena)

Figure 4. Activity 1.4.3 data collection: record entries into ONA up to September 10th (snapshot)
Image 3. Activity 1.4.3: photography of Patient cost survey interview in Vietnam by Ngoc Anh Le Thi

List of Abbreviations and Acronyms

3DF Three disease fund

CDC Centre for Disease Control (US)

DTU District TB Unit

GTB Global TB Programme

KNCV Koninklijke Nederlandse Centrale Vereniging tot bestrijding der Tuberculose

LSHTM London School of Hygiene and Tropical Medicine

MDR Multi-drug resistant TB

NTPs National TB Programmes

ONA Web based platform supporting secure management of electronic forms and data in real-time between health and development partners. It is accessible here https://ona.io/home/ or through https://whoONA.org/

PI Principal investigator

SOP Standard Operating Procedure

TB Tuberculosis

WHO World Health Organisation

WHO/CO WHO Country Office

WPRO Western Pacific Regional Office of WHO

1. Executive Summary

This project falls under the Challenge TB (CTB) sub-objective 10 Quality data, surveillance and M&E and has the overall objective of field testing the WHO generic protocol and instrument for measurement of proportion of TB patients (and their households) experiencing catastrophic costs in a given country[i]; to assess feasibility, operational challenges and solutions in order to fine-tune the generic protocol; to determine a baseline of the proportion of TB patients (and their households) treated in the NTP network, who incur catastrophic (direct and indirect) costs in the given country (Vietnam) and to summarize findings in a project report and in a peer reviewed journal paper. An extension has been requested to cover until December 2016. The milestones include adaptation of the generic protocol and questionnaire (1), kick off meeting in Vietnam (2), data collection and analysis (3) and GTB and local WHO staff involvement through WHO for project management (4).

This report focuses on the implementation of cost survey among TB patients in one country (Vietnam) which started in May 2016 and is ongoing. Previous preparatory work in Mozambique during January to March 2016 was interrupted due to insufficient co-funding. In Vietnam, from May 2016 to September 2016, the NTP set up a research team of 7 central-level staff, 3 provincial coordinators and 22 data collectors to conduct a nationally representative patient cost survey involving 720 eligible TB patients in health facilities across 20 clusters (with 36 patients per cluster). The sample includes 57 MDR-TB patients and the rest on drug-susceptible TB treatment. The objective of this survey is to produce a baseline measure for the percentage of TB-affected households experiencing catastrophic costs due to TB in Vietnam. The study has a secondary objective of validating the methodology for future patient cost surveys, particularly the use of dissaving strategies such as borrowing or selling assets as a proxy measure for catastrophic costs. The implementation of this survey is highly relevant for Vietnam who has expanded its social health insurance system with the aim of achieving universal health coverage by 2020.

Vietnam is a lower middle-income country and ranks amongst the 30 highest TB burden globally. The survey is among the first to apply the new WHO-recommended protocol for TB patient cost surveys and to adapt the generic instrument to the Vietnam context. The cross-sectional survey includes questions on the patient's current treatment and retrospective questions on the costs incurred by patients for their TB episode before they were diagnosed as having TB. As of early September, 484/720 (67%) survey was collected with all targets for patient selection met except for that of MDR patients in the intensive phase.

Banking on existing operational research capacity within the Vietnam National TB Programme, has been key for the implementation of this survey with minimum in-country technical assistance from WHO (just during survey piloting) and tight deadlines compliance. Both the WHO country office and WHO headquarters have been involved in various milestones of this project. ONA, a web-based data collection and management tool (https://ona.io/home/) was used successfully for data management (not for collection due to fund shortages for mobile devices). Preliminary results are expected by October 2016 and will follow the WHO-recommended methodology. They will estimate a total cost for each household by extrapolating reported costs and comparing these to household income. If the proportion of total costs exceeds 20% of annual household income, the TB-affected household will be deemed as having faced catastrophic costs. Results dissemination are planned for the end of 2016 and will be key to influencing financial and social protection policies in Vietnam where the NTP with support of WHO country office and other stakeholders will convene a meeting with Ministry of Health and other key government representatives to disseminate survey findings.

2. Introduction

One of the targets for the End-TB strategy is that no TB patient or their household should face catastrophic costs due to TB, and that this target should be achieved by 2020. To monitor progress, countries will need to measure the occurrence of catastrophic costs as part of their package of surveillance and M&E activities required to better describe local and national TB epidemiology, health seeking, and health and social care systems bottlenecks. This project is field testing a generic protocol and instrument for national TB patient costs surveys with two specific objectives:

1. To identify patient and health system predictors and reasons for catastrophic costs to guide policies on cost mitigation.
2. To determine baseline and periodically measure the percentage of TB patients treated in the NTP network (and their households) in the country who incur catastrophic (direct and indirect) costs.

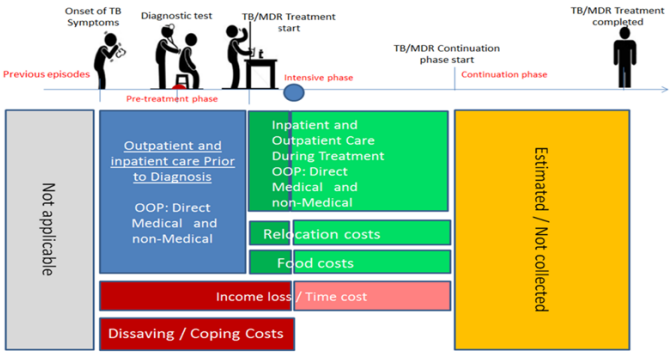
The establishment of a global catastrophic cost baseline assessment will start in 2015-16 and then accelerate in 2017-2020. In this project, field testing is supported in Vietnam (it was originally planned to implement this project in Mozambique, however due to implementation challenges and delays it was decided to change to Vietnam, see Q2 project report). Similar field testing is going on in parallel in 6 other

countries -funding source noted in parenthesis-: Ghana (LSHTM/USAID), Mongolia (Global Fund), Myanmar (WHO/CO and 3DF), Philippines (Global Fund), Solomon Islands and Timor Leste (Australian National University and WHO/WPRO), Uganda (CDC and USAID). In April 2017, a data review and protocol revision is planned (provided funding is available).

Methods: Across Vietnam, a nationally representative survey will be administered to 720 TB patients in health facilities from August 2016 to October 2016. The cross-sectional survey focuses on costs of TB treatment, direct and indirect, as well as household income and dissaving strategies. We will estimate a total cost for each household by extrapolating reported costs and comparing this to household income (**Figure 1**). If the proportion of total costs exceeds 20% of annual household income, the TB-affected household was deemed to have faced catastrophic costs. This survey includes all patients with TB, MDR or TB and HIV co-infected with no age restriction but requires a minimum of 14 days on treatment. All private and public health facilities within the National TB Programme network (i.e. those who notify cases) were included as part of the random sampling.

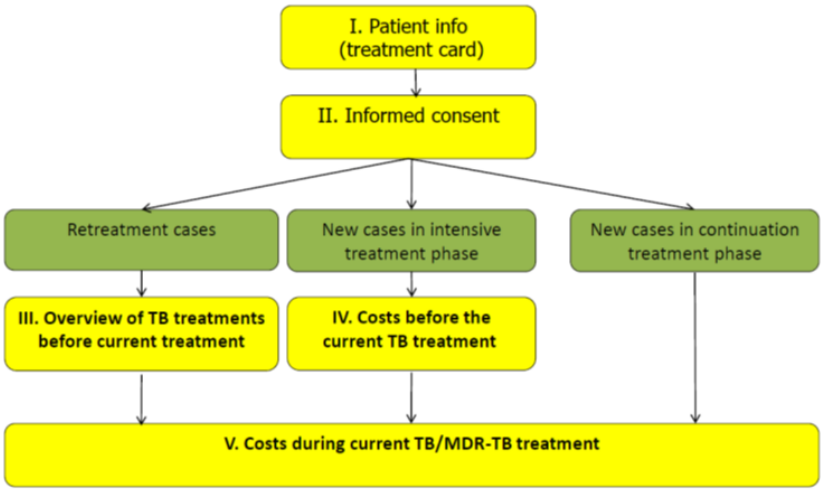
Survey process: Survey preparation and implementation is running from May 2016 (with joint WHO-NTP protocol development, **Figure 2**) to November 2016 (with joint WHO-NTP data analysis and report writing).

Figure 1. Overview of the Patient cost survey analytical approach with respect to data collection timing (Basic design: Cross sectional survey with retrospective data collection and projections). *Blue dot signals interview moment. Lighter shades of green and red, mean extrapolation of past costs into the future. Yellow means costs are estimated based on some answers and other patient's data. Grey means not applicable.)*



Source: WHO, 2015 Protocol for survey to determine direct and indirect costs due to TB and to estimate proportion of TB-affected households experiencing catastrophic total costs due to TB
Field testing version

Figure 2. Diagram representing Vietnam Patient cost survey instrument parts.



3. Progress by Objective/Sub-Objective

Objective 1. Improved access to quality patient centered care for TB, TB/HIV and MDR-TB services

Sub-objective 1. Enabling environment

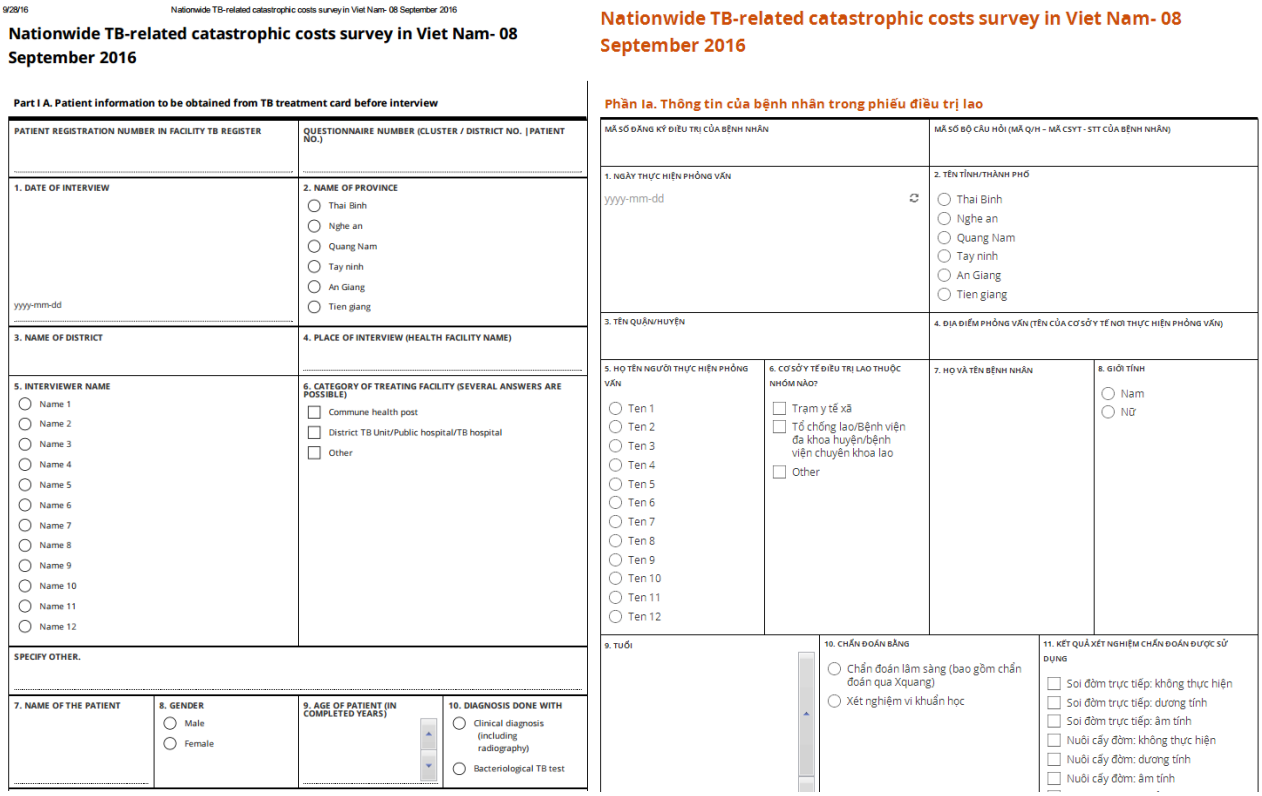
With this intervention on the provider side, it is expected that a more patient centered approach will be integrated into routine TB services for all care providers for a supportive environment. One of the activities to achieve this objective is that NTPs should routinely measure (as defined by the NTP strategic plan) the cost to patients for TB diagnosis, treatment and care. This project is field testing a generic protocol and instrument for national TB patient costs surveys (WHO, 2015) in Vietnam. Results will provide a baseline for the monitoring of one of the top ten End TB Strategy indicators: the percentage of households that experience catastrophic costs due to TB

Key Results

<u>Activity 1.4.1. Adaptation of the generic protocol and questionnaire</u>

In quarter 3, WHO's Global TB Programme and the WHO Vietnam country office provided substantial support to the NTP in Vietnam to adapt the generic protocol and submit a Direct Financial Cooperation proposal to WHO WPRO, the approval of which arrived only two days before the kick off workshop started. The NTP established a survey team (lead by Prof Veit Nhung and Dr Binh Hoa), in line with the instructions in the generic survey protocol. Sampling, patient recruitment procedures, data collection procedures and data management were also adapted to local conditions in Q3. Ethical approval was provided by the national ethical review committee as well as from WHO's regional office for the Western Pacific.

Figure 3. Activity 1.4.1: adaptation of the generic protocol and questionnaire: electronic data collection and management tool for Patient Cost Survey, Vietnam, 2016 (screenshot in English and Vietnamese of the first page of the electronic survey instrument used)



9/28/16 Nationwide TB-related catastrophic costs survey in Viet Nam- 08 September 2016

Nationwide TB-related catastrophic costs survey in Viet Nam- 08 September 2016

Part I A. Patient information to be obtained from TB treatment card before interview

PATIENT REGISTRATION NUMBER IN FACILITY TB REGISTER	QUESTIONNAIRE NUMBER (CLUSTER / DISTRICT NO. | PATIENT NO.)
1. DATE OF INTERVIEW yyyy-mm-dd	2. NAME OF PROVINCE ○ Thai Binh ○ Nghe an ○ Quang Nam ○ Tay ninh ○ An Giang ○ Tien giang
3. NAME OF DISTRICT	4. PLACE OF INTERVIEW (HEALTH FACILITY NAME)
5. INTERVIEWER NAME ○ Name 1 ○ Name 2 ○ Name 3 ○ Name 4 ○ Name 5 ○ Name 6 ○ Name 7 ○ Name 8 ○ Name 9 ○ Name 10 ○ Name 11 ○ Name 12	6. CATEGORY OF TREATING FACILITY (SEVERAL ANSWERS ARE POSSIBLE) ☐ Commune health post ☐ District TB Unit/Public hospital/TB hospital ☐ Other
SPECIFY OTHER.	
7. NAME OF THE PATIENT	8. GENDER ○ Male ○ Female
9. AGE OF PATIENT (IN COMPLETED YEARS)	10. DIAGNOSIS DONE WITH ○ Clinical diagnosis (including radiography) ○ Bacteriological TB test

Nationwide TB-related catastrophic costs survey in Viet Nam- 08 September 2016

Phần Ia. Thông tin của bệnh nhân trong phiếu điều trị lao

MÃ SỐ ĐĂNG KÝ ĐIỀU TRỊ CỦA BỆNH NHÂN	MÃ SỐ BỘ CÂU HỎI (MÃ Q/H - MÃ CSYT - STT CỦA BỆNH NHÂN)
1. NGÀY THỰC HIỆN PHỎNG VẤN yyyy-mm-dd	2. TÊN TỈNH/THÀNH PHỐ ○ Thai Binh ○ Nghe an ○ Quang Nam ○ Tay ninh ○ An Giang ○ Tien giang
3. TÊN QUẬN/HUYỆN	4. ĐỊA ĐIỂM PHỎNG VẤN (TÊN CỦA CƠ SỞ Y TẾ NƠI THỰC HIỆN PHỎNG VẤN)
5. HỌ TÊN NGƯỜI THỰC HIỆN PHỎNG VẤN ○ Ten 1 ○ Ten 2 ○ Ten 3 ○ Ten 4 ○ Ten 5 ○ Ten 6 ○ Ten 7 ○ Ten 8 ○ Ten 9 ○ Ten 10 ○ Ten 11 ○ Ten 12	6. CƠ SỞ Y TẾ ĐIỀU TRỊ LAO THUỘC NHÓM NÀO? ☐ Trạm y tế xã ☐ Tổ chống lao/Bệnh viện đa khoa huyện/bệnh viện chuyên khoa lao ☐ Other
7. HỌ VÀ TÊN BỆNH NHÂN	8. GIỚI TÍNH ○ Nam ○ Nữ
9. TUỔI	10. CHẨN ĐOÁN BẰNG ○ Chẩn đoán lâm sàng (bao gồm chẩn đoán qua Xquang) ○ Xét nghiệm vi khuẩn học
	11. KẾT QUẢ XÉT NGHIỆM CHẨN ĐOÁN ĐƯỢC SỬ DỤNG ☐ Soi đờm trực tiếp: không thực hiện ☐ Soi đờm trực tiếp: dương tính ☐ Soi đờm trực tiếp: âm tính ☐ Nuôi cấy đờm: không thực hiện ☐ Nuôi cấy đờm: dương tính ☐ Nuôi cấy đờm: âm tính

<u>Activity 1.4.2a.</u> Kick off meeting in Vietnam (June, 20th 2016)

A one-day survey kick-off meeting followed by a three-day pilot data collection and questionnaire review was organized in Hanoi, which Ines Garcia Baena attended. The kick-off meeting was attended by the NTP, WHO Vietnam (Dr Khanh), KNCV (Le Viet Anh and Nguyen Ngo Dang), The Union (Nguyen Hoai Giang) and interviewers for the pilot survey. The agenda for the day focused on questionnaire understanding and clarifications by interviewers participating in pilot testing. There were also two presentations. Dr. Hoang

Thi Thanh Thuy (from NTP and second in charge of this project with Dr Hoa) presented on objectives and methodology. Inés's presentation on the rationale for the work around measuring direct and indirect costs of patients affected by TB and their households and on sharing experiences from Myanmar was translated into Vietnamese and handed to participants.

Image 1. Activity 1.4.2: kick off meeting in Hanoi, June 20th 2016 (Photo by NTP staff)

Activity 1.4.2 b: pilot data collection

Piloting took place in Hai Ba Trung District health facility, Ha Noi (not part of survey sample) and involved MDR patients and DS-TB patients in intensive and continuation phase. Debriefing with Dr Hoa (Principal Investigator, NTP) revolved around the conduct of the pilot, feedback from interviewers, and progress to date on paper and web-based survey form. Following feedback, several recommendations were made including strengthening supervision checks as well as mock interviewing during subsequent interviewer trainings (these took place in July, in several provinces) and translating of SOPs into English to allow WHO to review (subsequently, some issues with patient selection described in the SOP were ironed out with support of WHO/HQ).

Inés trained Le Thi Ngoc Anh (data manager for this project) and Minh Le (interviewer during pilot and co-data manager) in ONA, the web survey software. Ines and Minh Le worked on the Vietnamese version of the e-survey tool and incorporated feedback from pilot data collection and amendments to the paper-based questionnaire. Content refinement and testing of the e-survey instrument was ongoing in July.

After local ethics review, the protocol and survey instrument was piloted in June. Ethics Review submission to WHO WPRO, training of interviewers in the various provinces and data collection started in July. Re-submission to Ethics Review was not necessary as the adaptation of the WHO instrument to the Vietnamese context did not eliminate any question nor change the content. Refinements to the Vietnamese translation were done by the Vietnamese research team following the pilot survey.

Image 2. Activity 1.4.2: pilot data collection in Hanoi. (Photo by Inés Garcia Baena)

Activity 1.4.3: Data collection and analysis (July-September 2016)

In mid-July the research team the NTP conducted a training for all data collectors in An Giang and Nghe to ensure they are all well trained about the research and questionnaire. Up to September 2016, 484/720 patients have been enrolled in the research (**Table 1**). Completed questionnaires have been reviewed by both provincial coordinator and research officer at national level before doing data entry. Questionnaires have been cleaned following data management procedures before there are entered into ONA. Since the NTP is also receiving completed questionnaires and following the data cleaning procedure some minor changes have been made to ONA to facilitate data entry. Therefore, there are not many records in the ONA electronic system. Therefore, as of report writing there are only a few records inputted into ONA. Data will be entered and preliminary results presented at the Union Conference (Liverpool, 24th October 2016). Presentation is available here: https://youtu.be/C7lWd_YAbQk

Image 3. Activity 1.4.3: Photo of Patient cost survey by NTP research team

Table 1 shows the progress of patient enrolment in 20 cluster of 6 provinces. Though recruitment progress is continuing, we found difficulty finding MDR patients to enroll during the intensive phase of treatment

Quality of the data:

In general, the quality of data is good. SOPs on data management are well applied. Completed questionnaire have been checked by provincial coordinators and research officer at national level. Only 8.2% (40/484) required rechecking due to some inconsistencies.

Monitoring from national and provincial level:

From the end July to the end August 2016, 12 monitoring trips were conducted, by national research officers, specialist from WHO Vietnam and provincial coordinators. The aim of the first monitoring was providing guidance/support to district staff members in conducting TB patients' interviews; providing comments and suggestion for better interview and better data collection.

The second monitoring in mid-August was focused on the quality of data. Each completed questionnaire was reviewed carefully; information was crosschecked with data sources such as the health record or register books.

For questionnaires that required validation, district staff members were asked to reschedule interviews to collect or correct the information.

Table 1: Activity 1.4.3 data collection: progress in patient's recruitment at 20 clusters – TB patient cost survey. Recruitment will continue until sample size and patient selection targets are reached.

Ob	Cluster	Enrollment											
		TB						MDR – TB					
		Intensive phase		%	Continuation phase		%	Intensive phase		%	Continuation phase		%
		Target	Enrolled		Target	Enrolled		Target	Enrolled		Target	Enrolled	
	Nghe An												
1	Nghi Loc	17	13	76	17	10	59	1	0	0	1	1	100
2	Vinh	17	10	59	17	11	65	1	0	0	1	1	100
3	Hung Nguyen	18	9	50	17	7	41	0	0	0	1	1	100
4	Yen Thanh	18	13	72	17	12	71	0	0	0	1	1	100
5	Thanh Chuong	17	12	71	16	12	75	1	0	0	2	1	100
	Thai Binh												
6	Hung Ha	17	6	35	17	5	29	1	0	0	1	2	200
7	Vu Thu	16	12	75	16	7	44	2	0	0	2	3	300
	Quang Nam												
8	Dien Ban	17	14	82	16	12	75	1	0	0	2	1	100
9	Que Son	17	12	71	17	14	82	1	0	0	1	1	100
	Tien Giang												
10	Cai Be	17	12	71	16	15	94	1	0	0	2	2	200
11	Cai Lay	17	14	82 %	16	13	81	1	1	100	2	2	200
	Tay Ninh												
12	Tan Chau	17	10	59	17	11	65	1	0	0	1	1	100
13	Chau Thanh	17	13	76	17	10	59	1	1	100	1	1	100 %
14	Trang Bang	17	14	82	17	10	59	1	0	0	1	1	100
	An Giang												
15	Long Xuyen	16	14	88	16	14	88	2	1	100	2	1	100
16	Chau Thanh	17	10	59	17	12	71	1	0	0	1	1	100
17	Phu Tan	17	10	59	16	10	63	1	0	0	2	1	100
18	Chau Phu	17	12	71	16	12	75	1	1	100	2	0	0
19	Cho Moi	16	10	63	16	13	81	2	0	0	2	1	100
20	Tan Chau	18	12	67	17	14	82	0	0	0	1	1	100

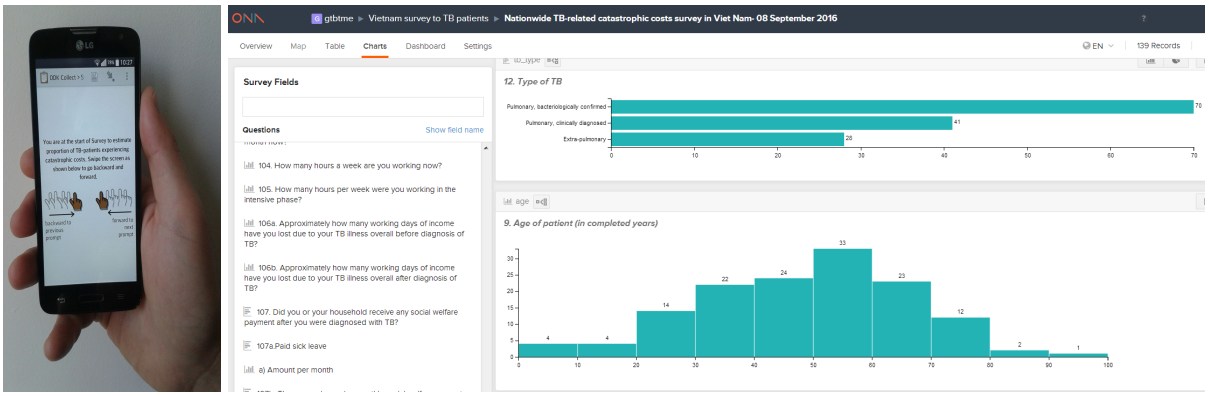
Data entry:

ONA – a web based data collection and management tool (developed by WHO for Ebola) has been adapted for data entry in this survey (**Figure 1**). Using this interface Inés Garcia Baena (WHO/HQ) and the Vietnam data manager (Tuan Anh) can view the data, screen the quality of data and promptly give comments if necessary. Skip patterns and fine tuning of that electronic data entry tool completed by both individuals (remotely).

An SOP on data management has been developed to guide data entry. To check the quality of the data entry, the data manager randomly checks information that was entered with the information in the paper based system. 5% of questionnaires are cross checked to ensure the quality of data entry. Any identified discrepancy is reported to the data entry staff member to improve practices as well as the research coordinator, in case there's a need to change data entry staff.

Up to October 3rd, 139/484 (28%) records, have been entered onto ONA (**Figure 2**). The remaining records will be entered in early October including all data collected throughout September 2016.

Figure 4. Activity 1.4.3 data collection: record entries into ONA up to October 3rd (snapshot)



Key achievements up to September 10th:

- Pilot in Ha Noi has been conducted successfully and provided useful ideas to adapt the protocol and questionnaire and its SOPs (June).

- Health staffs at DTUs have been well trained before main data collection start (July)

- Good quality of data collected from 20 clusters (August-September)

- Progress of TB patient recruitment is good. All clusters will reach their targets by the end of September (September)

- An electronic data collection and management tool using ONA has been developed and has proven useful for consistent data entry.

Challenges:

- There are no MDR TB patients in the intensive phase of treatment at some selected clusters hence we are not sure if we can recruit enough participants by the end of September

- Some clusters don't have enough TB patients who are in intensive treatment phase.

- It takes around 2 hours to interview patients who are illiterate as health staff members need to explain questions repeatedly and in different ways to make sure they are understood. - In some clusters, the medical records of MDR – TB patients don't have enough information to fill in the questionnaire, especially information on tests used for MDR TB diagnosis.

- Patients who make income through panhandling or begging were not able to provide much information on their income, or income loss during their treatment as they receive food from their neighbors regularly.

- There are some difficulties in calculating the total income and salary/or for those who have seasonal jobs (1- 2 days/months and don't have any job for 3 months or more before TB diagnosis) or if all family member are farmers it's difficult to identify the income of the individual patient.

Recommendations:

- Research officer and provincial coordinators will focus on the questions related to income, income loss, salary and asset ownership in the next monitoring period.

- Cross checking will continue and data entry checking to ensure the quality of collected data and promptly respond if they identify any issues in completed questionnaires.

- Take priority in enrolling the patients who are in intensive treatment as this period is only 2 months.

- Consider in future surveys whether to enroll patients who are homeless.

District staffs should take notes for their clarification of information that they are not sure the answer is correct or not.

Districts are encouraged to connect with provincial coordinators and research officers to ask for their support in collecting data.

Table 2. Outcome indicators, milestones planned and achieved

#	Output Indicators	Indicator Definition	Baseline (Year/ timeframe)	Target Y2	Result Y2
	Percentage of households that experience catastrophic costs due to TB in Vietnam	% households who incur in costs equivalent to 20% or more of household's annual income relative to those on treatment	2016	Baseline established, 2016 Target in 2020 is zero	(in progress)

Sub-objective 1. Enabling environment								
Planned Key Activities for the Current Year	Activity #	Planned Milestones				Milestone status	Miles-tone met?	Remarks *(reason for not meeting milestone, actions to address challenges, etc.)*
		Oct-Dec 2015	Jan-Mar 2016	Apr-Jun 2016	Year end	Oct 2015 – March 2016		
Adaptation of the generic protocol and questionnaire	1.4.1	X				Completed in June	**Met**	Delay due to the fact that the project country was changed to from Mozambique to Vietnam in May, and the project team is working hard to catch up with the timeline.
Kick off meeting in Vietnam	1.4.2		X			Done in June	**Met**	Changed to Vietnam
Data collection and analysis	1.4.3			X	X	Pilot data collection June, data collection will be finalized in September 2016	**Partially met**	Delay due to the fact that the project country was changed to from Mozambique to Vietnam in May, and the project team is working hard to catch up with the timeline. On
Attendance to Geneva meeting	1.4.4						**N/A**	This was changed in the amended project plan
Consultant recruited to WHO for project management	1.4.5	X	x	x	x	Ines Garcia has provided project management and substantial TA.	**Met**	

4. Key Challenges during Implementation and Actions to Overcome Them

Table 3. Challenge and actions to overcome them (May-September 2016)

Challenge	Actions to overcome challenges
Technical	
Target patient recruitment per facility has not been reached for MDR patients in intensive phase	Currently in discussion: either extend data collection period or replace random sampling of patients within selected cluster with purposive sampling to ensure target number of MDR patients in intensive phase is part of the data collected by end September 2016
Administrative	
Major project change from Mozambique to Vietnam took place in April 2016	Swift survey preparations with Vietnam NTP, WHO and WHO Vietnam allowed for DFC proposal submission in May 2016
Vietnam NTP survey funds were only available from June 18th due to DFC approval depending on IRB and WHO WPRO Ethics Review	WHO Vietnam and WHO close follow up with WHO WPRO allowed for timely fund release for pilot survey to be conducted

5. Lessons Learnt/ Next Steps

1. Existing solid operational research capacity in country has been key to the smooth survey implementation

Banking on existing operational research capacity within the Vietnam National TB Programme, has been key for the implementation of this survey with minimum in-country technical assistance from WHO (just during survey piloting) and tight deadlines compliance. Both WHO country office and WHO headquarters have been involved in various milestones of this project. ONA, a web-based data collection and management tool (https://ona.io/home/) has been used successfully for data management (not for collection due to fund shortage for mobile devices). Further details on challenges related to data collection were mentioned earlier in this report.

2. Next steps:

a) Finalize data collection (end September 2016). 484/720 (67%) has been completed by early September and 139/720 (19%) patient records have been entered into the web based data management tool (ONA). The remaining data collection and data cleaning and entry is ongoing at the time of this report writing.

b) Data cleaning and analysis (October 2016). This work will be carried out by Tuan Anh in collaboration with Inés Garcia Baena under the overall guidance of Dr Binh Hoa (PI).

c) Dissemination of results (October-December 2016). Preliminary results will be available in October and presented at the Union meeting (26-29 October). The NTP will convene a consultation to review results and to discuss the dynamics behind the highest areas of spending and income losses associated with TB and MDR care. These discussions will inform financial and social protection policies, provided they involve partners from other ministries too.

d) Lessons learned will feed into Task Force meeting (April 2017). Lessons learned from this project and other surveys financed by other donors, will feed into the third Patient cost survey task force meeting organized by WHO/GTB, to be held in April 2017. The meeting will inform the production of a final generic protocol and instrument that will replace the "field testing" version currently used. It will also discuss the feasibility and operational challenges and solutions found during field testing phase.

[i] World Health Organization, 2015. Protocol for survey to determine direct and indirect costs due to TB and to estimate proportion of TB-affected households experiencing catastrophic costs: Field testing version. Accessible on http://www.who.int/entity/tb/advisory_bodies/impact_measurement_taskforce/meetings/tf6_background_5a_patient_cost_surveys_protocol.pdf?ua=1